

Problem-Solving Investigation: Make an Organized List

EXAMPLE

MAIN IDEA

- Solve problems by making an organized list.

BOTANY Marcus is planning an experiment to determine the best growing conditions for a certain type of plant. The plants will be kept in high, medium, or low sunlight. They will be given either a large, medium, or small amount of water. How many plants should Marcus buy in order to test each possible combination of growing conditions?

UNDERSTAND You know there are different amounts of sunlight and different amounts of water. You need to know the number of possible combinations of these growing conditions.

PLAN Make a list of all the different possible combinations. Use HS for high sun, MS for medium sun, LS for low sun, LW for large water, MW for medium water, and SW for small water.

SOLVE

There are different combinations of growing conditions.

CHECK

Check the answer by seeing if each condition is accounted for three times in the list of combinations.

Check Your Progress

GYM BAGS The basketball cheerleaders are ordering new gym bags. They can choose from two styles in either blue or black with white, yellow, or gold lettering. How many different bags are there?

HOMEWORK ASSIGNMENT

Page(s):

Exercises: